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Transmitter Power Output Determination

Call Sign:
FM Translator at 94.5 MHz
Bemidji, Minnesota
for Radio Assist Ministry, Inc.
and Shine the Light, Inc
October 8, 2007

This document details how licensed TPO (Transmitter Power Output) was determined.

Transmitter Power Output (TPO)	104.5 Watts (0.1045 KW)
6 feet of Belden 9913 cable	98.1% Efficiency (-0.084 dB)
Telewave TWPC-1003-3 Band-Pass Filter	79.4% Efficiency (-1.0 dB)
6 feet of Belden 9913 cable	98.1% Efficiency (-0.084 dB)
125 feet of Cablewave FLC12-50J ½" cable	82.6% Efficiency (-0.832 dB)
Antenna Input Power	66 Watts
Armstrong FMA707-3 Antenna	1.50
Effective Radiated Power	99 Watts (0.099 KW) Vertical and Horizontal